

An Interim Report on Photo Enforcement at Three Highway-Rail Grade Crossings in DuPage County

**Research & Analysis Section
Transportation Division**

Working Paper 2001-01

Illinois Commerce Commission
527 East Capitol Avenue
Springfield, Illinois 62701
www.icc.state.il.us



May 2001

EXECUTIVE SUMMARY

In 1996, the General Assembly required the Commerce Commission to conduct a two year evaluation of the effectiveness of automated photo enforcement of traffic laws at highway-railroad grade crossings. Three locations: Irving Park Road in Wood Dale, River Road in Naperville, and Sunset Avenue in unincorporated DuPage County were selected. Each site employs a different type of photo enforcement technology; however all three sites function in a similar manner by recording images of a motor vehicle not complying with activated warning devices. Such images are then used as evidence on which to base the issuance of a citation to the registered owner of the vehicle.

Preliminary indications suggest that automated enforcement is working very well in discouraging motorists from violating grade crossing warning devices. At Irving Park Road in Wood Dale, there were 274 violations in January 2000, which was the first full month of operation at this site. There were 145 violations recorded in September 2000, which was the last full month the site was in operation. A decline of 47 percent in the number of violations was achieved based on a simple January to September comparison. However, the City of Wood Dale ceased issuing citations in October 2000 after a decision from Associate Judge Brian McKillip, who ruled that the process used by the City of Wood Dale to issue citations was unconstitutional. Currently, there are several bills pending in the General Assembly that address the Judge's decision and each would provide for the continuation of automated photo enforcement at Wood Dale.

The City of Naperville's site at River Road has also achieved a reduction in the number of violations per month. There were 174 violations in July 2000, the first month the site was in operation, and 85 violations in November 2000. This is a 51 percent decline in the number of violations per month. Naperville issues citations under local ordinance and has not been affected by Judge McKillip's decision.

The third photo enforcement site in Winfield Township in unincorporated DuPage County, will be ready to go on-line in May 2001 once assurance testing is complete and baseline violation rates have been collected. However, the DuPage County Sheriff's office will not issue citations unless the General Assembly has amended the original Act to remedy the deficiencies outlined by Judge McKillip.

Photo enforcement installations are expensive. The average cost to install and operate the three sites for one year is \$301,000. Additional costs are incurred by the local police departments to provide staff to process citations and by the court system to adjudicate the cases brought before the Court. However, with the current fine of \$500, a site which issues at least 200 citations each year, may theoretically offset the costs within three to four years.

This report provides a preliminary assessment of the effectiveness of automated photo enforcement to reduce the number of daily traffic law violations at highway-railroad grade crossings. The development and performance of each site is briefly discussed and a comparison of the effectiveness of each site is made.

TABLE OF CONTENTS

Section	Page
Executive summary.....	ii
Table of contents.....	iii
1.0 Introduction.....	1
2.0 Background.....	2
3.0 Summary of each site.....	6
3.1 Irving Park Road at Wood Dale	6
3.2 River Road at Naperville.....	11
3.3 Sunset Avenue in Winfield Township.....	14
4.0 Summary.....	15
Appendix A: Timeline.....	A1
Appendix B: Legal Foundation of photo enforcement in Illinois.....	B1
Appendix C: Sample citations	C1
Appendix D: Site maps and photographs.....	D1



ILLINOIS COMMERCE COMMISSION

Richard L. Mathias
Chairman

May 23, 2001

Dear Members of the General Assembly:

Pursuant to Public Act 89-454, the Commerce Commission was directed to study the costs and benefits of photo-enforcement devices at three railroad grade crossings in DuPage County, and then convey those findings to the General Assembly. Because the technology was unavailable and due to legal challenges and local permitting problems, this initiative has taken longer than expected by the framers of the legislation. At this time only two of the devices have been in service long enough for the Commission to evaluate their effectiveness. Accordingly, we have prepared this "Interim Report" to give the General Assembly our initial assessment of this technology, and will deliver a Final Report in 2002.

Sincerely,

Richard L. Mathias
Chairman

Enclosure

1.0 INTRODUCTION:

In 1996, the General Assembly required the Illinois Commerce Commission (ICC) to conduct a two year evaluation of the effectiveness of automated photo enforcement of traffic laws at highway-railroad grade crossings. This report presents the General Assembly with a summary of the Commission's **preliminary** experience with the three test photo enforcement locations through December 31, 2000.

In 2000, there were 177 vehicle-train collisions which occurred at highway-railroad grade crossings in Illinois. Seventy-one percent of these collisions occurred at grade crossings protected by automatic warning devices, such as flashing lights or flashing lights and gates. In order to reduce the number of collisions caused by motorists willfully disregarding activated warning devices, the Illinois General Assembly passed Public Act 89-454 which required the ICC to conduct a two-year pilot program to test the effectiveness of automated photo enforcement of traffic laws to detect and ultimately deter grade crossing violations.

The General Assembly required the test to be carried out in cooperation with Metra, the Commuter Rail Service Board of the Regional Transportation Authority (RTA) of northeastern Illinois, and local law enforcement agencies and that it take place in DuPage County. Three locations were selected based upon a collision frequency analysis conducted by the Railroad Safety Section of the Transportation Division:

- * Irving Park Road in the City of Wood Dale,
- * River Road in the City of Naperville, and
- * Sunset Avenue in Winfield Township.

All three locations are testing photo enforcement as the means of providing automated enforcement. Each location is testing a slightly different type of photo enforcement. Wood Dale is using a system from Lockheed Martin IMS; Naperville is using a system from Science Applications International Corporation (SAIC); and DuPage County is using a system from Nestor Traffic Systems at the Winfield Township location.

All three systems essentially apply the same process in that a camera records apparent violations and the frames of film are automatically reviewed by specialized software to recognize clear violations. Once a violation has been recognized, the cooperating police department uses software to review the violations to determine which violations should receive a citation. Citations are then generated automatically by custom software and sent to the address of the registered vehicle owner. The only significant difference between the technology employed at the three sites is that Wood Dale's system from Lockheed uses traditional "wet" 35mm film to record potential violations which is then digitized, whereas the other two sites are using completely digital technology.

For a variety of reasons all three sites experienced a delay in becoming established. The primary reason common to all three sites was the lack of qualified responses to the bid requests put out by Metra for the Wood Dale site and the city of Naperville for the River Road site. Neither Metra nor Naperville had any prior experience with requesting proposals for

sophisticated traffic control devices such as photo surveillance. ICC staff was able to identify the problem and worked with staff from the Jet Propulsion Laboratory to develop a list of firms which had experience in applying photo enforcement technology to traffic safety issues. Finally, after three bid lettings for Wood Dale and two for Naperville, successful bidders were selected (Lockheed and SAIC).

All three sites also experienced the usual run of problems related to constructing, testing and implementing any type of complex civil engineering project. For example, contractors ordered the wrong materials, some materials could not be delivered in a timely manner and contractors experienced difficulty in obtaining the proper permits from the municipalities involved. An additional challenge was coordinating work with the daily train operations of Burlington Northern Santa Fe, Metra and Union Pacific.

With a December 8, 1999 activation Wood Dale was the first site to come on-line. Between December 8, 1999 and October 18, 2000, the Wood Dale Police Department issued 731 citations. Wood Dale ceased issuing citations on October 18, 2000 following Associate Judge Brian McKillip's decision finding that the process used by the police department to issue citations was unconstitutional.

River Road in Naperville was the second site to become active, going live in July 2000. Between July 1 and December 31, 2000, the Naperville Police Department issued 315 citations. Sunset Avenue in Winfield Township was still under construction as of March 2001.

Sunset Avenue in Winfield Township in unincorporated DuPage County will undergo acceptance testing in April 2001 and collect baseline violation rates in May 2001 and be ready to issue citations should the General Assembly amend the state statute to remedy the deficiencies identified by Judge McKillip.

Appendix A provides a time-line detailing the significant events in the process of establishing the three sites. Appendix B provides a summary of the impact of Judge McKillip's decision upon the automated enforcement program at Wood Dale.

2.0 BACKGROUND:

Section 11-1201 of the Illinois Vehicle Code requires all motorists to obey warning devices at railroad-highway grade crossings. Motorists must stop their vehicle no closer than 15 feet from a grade crossing whose warning devices (fixed warning devices as well as train based warning devices) are active. Section (b) also indicates that "no person shall drive through, around or under any crossing gate or barrier at a railroad crossing while such gate or barrier is closed or is being opened or closed."

Automated photo enforcement is designed to automatically monitor motorists' adherence to the law and to issue citations to those observed in violation of the law. Automated enforcement does not require an officer to witness first hand the violation at the instant of occurrence, but rather allows for a review of photographic evidence of the alleged violation and

the issuance of a citation after concluding that the motorist did violate traffic laws at that grade crossing.

As of June 2000, “eleven states had authorized automated enforcement of traffic laws and an additional nine states are considering the legislation” [Chicago Tribune 01-23-01]. Photo enforcement is used to bring about driver compliance with several types of traffic control devices, such as highway traffic signals and tollway fare collection systems, in addition to traffic control devices at grade crossings. Many communities have found photo enforcement to be a highly effective tool curbing red-light running.

Illinois Vehicle Code Section 11-1201.1 (a) requires that a photo enforcement system perform the following functions:

- * obtain a clear image or photograph of the vehicle,
- * obtain a clear image or photograph of the driver of the vehicle,
- * obtain a clear image or photograph of the vehicle registration plate, and
- * record the time, date and location of the violation.

If all the criteria identified above have been met, then the local law enforcement agency responsible for enforcement of traffic laws at that location may issue a Uniform Traffic Citation accompanied with a written document which explains the violator’s rights and obligations and how the violator can elect to proceed by either paying the fine or challenging the issuance of the Uniform Traffic Citation. Railroad crossings equipped with automatic enforcement systems must have signs posted indicating that the grade crossing is under surveillance, and that citations will be issued and the amount of the fine. Figure 1 displays the signs used by Wood Dale and Naperville to warn motorists that they are under surveillance.



Wood Dale Sign 1



Wood Dale Sign 2



Wood Dale Sign 3



Naperville Sign 1

Figure 1. Warning signs.

Photo enforcement is very simple in concept and relatively straight forward in terms of implementation. Mechanically, sensors in the pavement called “loop detectors”, sense the presence of a vehicle at the crossing. If a train has activated the grade crossing warning device, then the cameras will become active. Once an image has been recorded, it is sent to a central location for processing and reviewed to determine if a violation has occurred. Both the Naperville and Wood Dale police departments allows a delay of five seconds after the flashing lights have activated before the issuance of a citation. The review can be accomplished manually, or by applying computer software to automatically recognize when a violation occurs. Once a violation has been identified, further review is necessary to verify that the six requirements for issuing a citation have been met.

Currently, in order to issue a citation, the vehicle must be registered to a non-corporate owner who resides in Illinois. The driver of the vehicle is the person whom the citation is intended to reach, however since only the registered owner of the vehicle is public knowledge,

the citation is addressed to the registered owner. If the registered owner was not the driver when the violation occurred, the registered owner simply has to appear in court and indicate that he or she was not the driver and the citation will be dismissed. Appendix C provides a sample of the citations used by the Wood Dale and Naperville Police Departments.

It is important that the image or photograph clearly record the driver, the vehicle and the license plate. Before the citation is issued, the police department consults driver and vehicle registration databases maintained by the Secretary of State's office to confirm that the sex and age of the registered owner match that of the individual recorded on film.

Lastly, human judgment is applied to make sure that there were no extraordinary circumstances, such as a motorist seeking to get out of the path of an approaching emergency vehicle, which may have inadvertently prompted the motorist to violate traffic laws in a particular instance. In addition to the still cameras, both Naperville and Winfield both use video cameras which provide a "big picture" feel for what was occurring at the crossing at the time of the violation.

3.0 SUMMARY OF EACH SITE:

3.1 Irving Park Road in Wood Dale

Using baseline violation rates collected in November 1999 Irving Park Road in the City of Wood Dale was the first installation to come on-line with full system activation occurring on December 8, 1999. This grade crossing is on Metra's Milwaukee West Line to Elgin and has approximately 75 trains per day of which 58 are Metra commuter trains. There is an average daily traffic (AADT) count of 32,000 vehicles on Irving Park Road which is a divided four lane state highway. Appendix D provides a site map of each of the locations and Appendix E provides an aerial photo and several still photos of each site.

The Wood Dale site utilizes a system from Lockheed Martin IMS that employs traditional "wet" 35 millimeter film. The film is digitized by Lockheed and automatically reviewed by its staff. Lockheed then forwards to the Wood Dale Police Department all clear violations for final review by the Wood Dale Police Department who will then issue a citation to the registered owner of the vehicle photographed. Figure 2 provides a general overview of the Irving Park Road site.

Figure 2. Irving Park Road in Wood Dale, Illinois looking east.



This installation is unique in that only the two westbound traffic lanes are under surveillance. The two eastbound traffic lanes are not monitored because eastbound traffic is effectively controlled by a four-way signalized intersection with Wood Dale Road, 362 feet to the west. Figure 3 provides an illustration of the camera installations in use at Wood Dale.



Captures rear of vehicle.



Captures front of vehicle.



Close-up of cameras 1 and 2.



Auxiliary camera on driver.

Figure 3. Cameras and lighting assemblies used at Wood Dale.

Wood Dale is also unique in that the City has recently constructed a bypass lane that allows traffic which is heading west on Irving Park Road and wishes to turn north onto Wood Dale Road to exit onto the bypass lane just prior to reaching the grade crossing on Irving Park Road. This traffic thus avoids both grade crossings on Irving Park Road and Wood Dale Road. The bypass lane eliminates many trips that once had to cross both grade crossings as well as the four-way signalized intersection of Irving Park Road and Wood Dale Road.

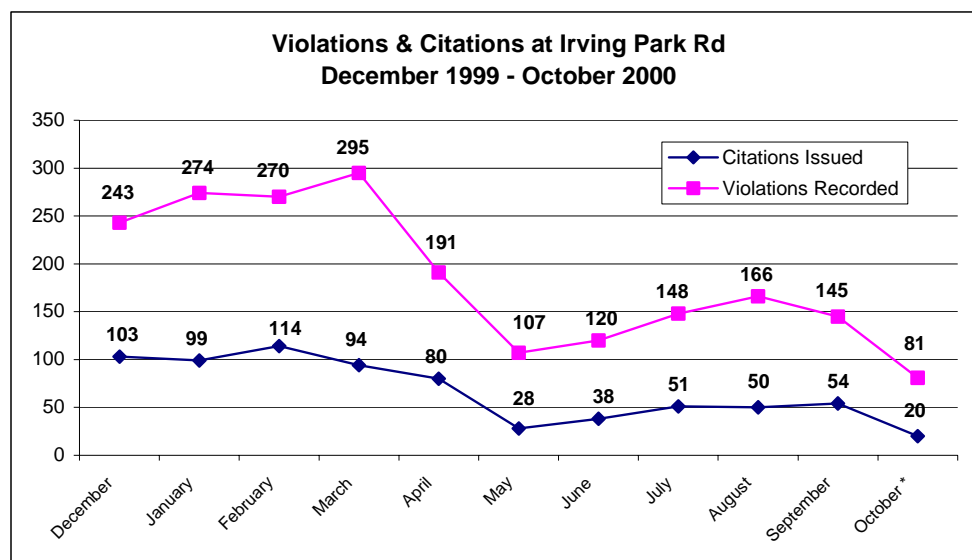
Through October 18, 2000, Lockheed had reviewed 9,654 frames of film. A Lockheed technician removes the film from the camera and sends the film to California for development and digitization. The film is then reviewed to determine if there was a violation. Out of the 9,654 frames of film reviewed, 2,040 apparent violations were identified. Of the 2,040 apparent violations, 731 (36 percent) individuals received citations. Table 1 summarizes the reason why the 1,309 (64 percent) apparent violations did not receive a citation.

Table 1. Alleged violations at Wood Dale which could not be prosecuted.

Result of Review	Number	Percent
Dark Interior	435	33.2%
Clarity of Driver	173	13.2%
Framing of Car	94	7.2%
Address Match Failure	88	6.7%
Driver Obstructed	85	6.5%
No Plate	70	5.3%
Vehicle Match Failure	62	4.7%
Exposed	55	4.2%
Out of State	44	3.4%
Car Obstructed	36	2.8%
Operator Error	31	2.4%
Equipment Malfunction	29	2.2%
Clarity of Plate	25	1.9%
Other	82	6.3%
Total	1,309	100.0%

After the preliminary review, Lockheed had detected 2,040 potential violations, which after further review by the Wood Dale Police Department, resulted in the issuance of 731 citations. Figure 4 summarizes the number of violations and citations issued between December 8, 1999, and October 21, 2000. Please note that the number of violations and citations for December 1999 and October 2000 are not for the complete month.

Figure 4. Violation and citation summary by month.



At Irving Park Road in Wood Dale, there were 274 violations in January 2000, which was the first full month of operation at this site. There were 145 violations recorded in September 2000, which was the last full month the site was in operation. This represents a decline of 47 percent in the number of violations per month. The Federal Railroad Administration (FRA) proposed rule requiring horn sounding at all public at-grade crossings requires that photo enforcement installations maintain a 49 percent reduction, or greater, in the occurrence of violations from the baseline violation rate. A strict interpretation of the effectiveness of Wood Dale in deterring violations would mean that this site is not maintaining the effectiveness threshold which FRA may require if the final rule requiring train horns is adopted as published.

Wood Dale has been very successful in achieving guilty judgements for the cases prosecuted over the first ten months of operation. As of October 1, 2000, 492 of the 731 citations have been processed of by the judicial system. Seventy-five percent of the cases have resulted in convictions. In approximately 59 percent of those cases, the courts have implemented the required \$500 fine and costs or 50 hours of community service. In the remaining 41 percent of cases, the State's Attorney has reduced the charge and imposed a lesser fine. Table 3 provides a summary of the dispositions and Table 4 provides a summary of the fines imposed in the guilty dispositions.

Table 3. Summary of dispositions.

Disposition	Number	Percent
Guilty	367	74.6%
Dismissed	90	18.3%
Not guilty	35	7.1%
Total	492	100.0%

Table 4. Summary of guilty dispositions.

367 Guilty Dispositions	Number	Percent
Court Supervision	1	0.3%
\$50 fine	1	0.3%
\$100 fine	43	11.7%
\$150 fine	18	4.9%
\$175 fine	1	0.3%
\$200 fine	72	19.6%
\$250 fine	15	4.1%
\$500 fine	181	49.3%
Community service (40 or 50 hours)	35	9.5%
Total	367	100.0%

Over the course of operation, according to both Lockheed and the Wood Dale Police Department, "there have been no mechanical failures from the system, however due to a few film jams in one or both of the cameras there was a cumulative downtime of approximately nine days" providing an overall availability level of 97 percent between December 1999 and December 2000. There was only one documented occurrence of a gate malfunction during this period.

Unfortunately, the Irving Park Road site has experienced a substantial procedural problem. On October 18, 2000, Associate Judge Brian R. McKillip of the Eighteenth Judicial Circuit, DuPage County issued a ruling finding two significant flaws with the photo enforcement process being used at Wood Dale. The two flaws in Judge McKillip's opinion are that the citation and accompanying notice informing recipients of their rights and responsibilities is insufficient and that the procedure for admitting digital images into evidence not sufficient. Appendix B provides an analysis of Judge McKillip's decision, and a discussion of several bills pending in the General Assembly as of March 2001 that would remedy the deficiencies which Judge McKillip identified.

The Wood Dale Police Department has stopped issuing citations and is instead issuing warnings to motorists who have been observed in apparent violation of traffic laws at this location. The Wood Dale Police Department has altered the notice that would accompany the citation to provide additional information to the recipient clarifying their rights and responsibilities. The rewritten citation will clearly indicate that this is a "must appear" violation, meaning that the recipient must appear in court to answer to the charge. This change in the notice addresses Judge McKillip's first concern.

3.2 River Road in Naperville

River Road was the second installation to come on line, with baseline violation rates being captured in May and June of 2000 and full activation in July 2000. The River Road site is using a completely digital system from Science Applications International (SAIC). River Road at Naperville is on Metra's BNSF Line to Aurora. The grade crossing has approximately 147 daily trains with an average daily traffic count of 9,100 vehicles on River Road which is a local street. Figure 5 provides a general overview of the River Road site.

Figure 5. River Road in Naperville, Illinois looking south before the installation of the cameras.



The photo enforcement process utilized by SAIC at Naperville is somewhat similar to the process implemented by Lockheed at Wood Dale. The most notable difference between the two sites is that the Irving Park Road location at Wood Dale is monitoring only one direction of travel (westbound), whereas the River Road site is monitoring both directions of travel (north and south). A second difference is in the technology used to record images. Wood Dale uses a traditional 35 mm camera with "wet" film, whereas the River Road site is using a digital camera, supplemented with a digital video camera, to record violations.

Digital images are transmitted directly to a dedicated workstation at the Naperville Police Department where they are reviewed by the officer responsible for Naperville's photo enforcement program. Figure 6 provides an illustration of the cameras in use at Naperville.



Camera installation on north side of track



Camera installation on south side of tracks.

Figure 6. Camera installation at Naperville.

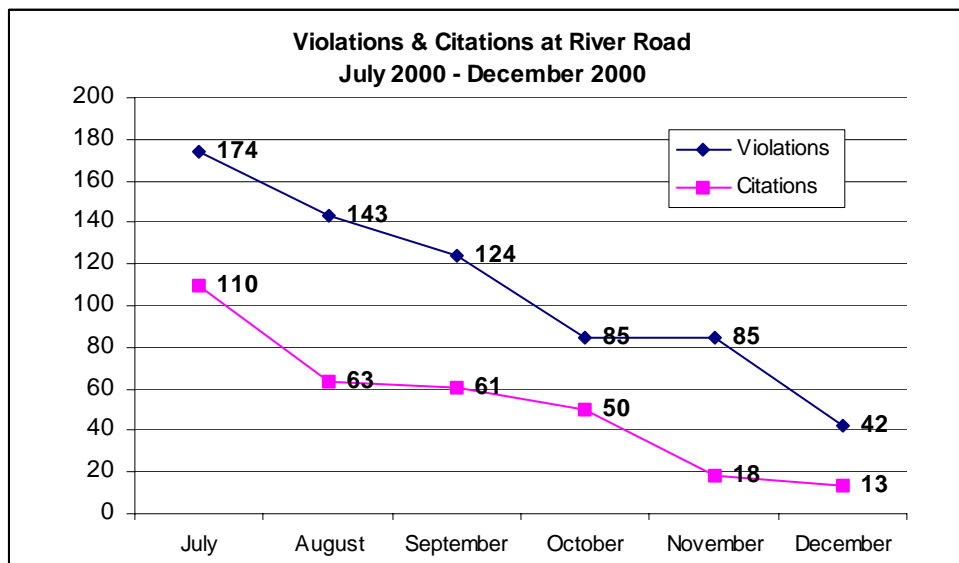
Between July 1, 2000, and December 31, 2000, Naperville identified 575 possible violations. After further review, 315 instances were determined to be offenses likely to bring a guilty judgment, for which the Naperville Police Department issued citations. Table 2 provides a summary of the images which did not meet Naperville's standard for issuing a citation.

Table 2. Apparent violations at Naperville which could not be prosecuted.

Reason	Number	Percent
Company Owned Vehicle	126	45.3%
No Plates	38	13.7%
Plate Obscured	11	4.0%
Vehicle Touched gate, but Did Not Proceed	3	1.1%
Out-of-State Vehicle	1	0.4%
Plate Unreadable	17	6.1%
License or Plate Data Not Available	29	10.4%
Poor Quality Photos	53	19.1%
Total	278	100.0%

Figure 7 graphically illustrates the decline in the number of monthly violations. November and December data under-represents the number of true violations due to mechanical problems with the lighting in November and snow in December. The decline in the number of violations between July's level of 174 violations and October's level of 85 violations is 51 percent. Naperville would meet the FRA's effectiveness threshold if the final rule requiring whistle sounding is published as proposed.

Figure 7. Violations and citations at River Road July 2000 - December 2000.



For the 239 cases in which a guilty judgement was rendered, 56 percent of the cases received community service plus court costs and court supervision, while 41 percent of the cases received a \$500 fine plus court costs. Table 5 provides a summary of the citations adjudicated through December 31, 2000.

Table 5. Summary of dispositions.

Disposition	Number	Percent
Guilty - \$500 fine + costs	99	41.1%
Guilty - 50 hours community service + costs	135	56.0%
Dismissed	5	2.1%
Total	239	99.2%

River Road experienced mechanical problems in November and December. In November, the lights used to provide supplemental illumination failed; and in December, Naperville's cameras experienced a build up of condensation in the cameras which impaired the effectiveness of the cameras in capturing high quality images. The camera housings are filled with an inert gas and, during December, the inert gas leaked out and moisture seeped into the camera housing. Once temperatures fell below freezing, the moisture within the housing froze and obscured the digital images being produced. A substantial number of the violations observed in November and December could not be prosecuted due to poor quality images. Overall the availability rate of the Naperville site is estimated to be 83 percent.

3.3 Sunset Avenue near Winfield

The third and final site is at Sunset Avenue in unincorporated Winfield Township. This site was still under construction as of March 2001. Sunset Avenue is on Metra's UP West Line to Geneva. The grade crossing has 110 trains per day, with 58 of these being Metra trains. Approximately 159 vehicles per day use this crossing to access a residential subdivision.

The Sunset Avenue site uses a completely digital surveillance system from Nestor Traffic Systems. Both directions of travel are also under surveillance at this location. The surveillance system from Nestor uses two digital cameras to capture an image of the license plate and driver and also employs a video camera to record the general scene at the time of an apparent violation. The video camera will be particularly helpful in preventing the issuance of any citations based on a false activation of the warning gates. Baseline violation rates are scheduled to be gathered in April 2001 and the site should be fully operational and ready in May 2001. The DuPage County Sheriff's office has indicated that, unless the General Assembly amends the current statute, that they will not issue either citations or warnings, to motorists observed violating traffic laws at this location.

Figure 8. Sunset Avenue in Winfield Township looking south before the installation of the cameras.



The site at Winfield has suffered from a number of construction related delays. The general contractor at this site ordered incorrect materials. The contractor could not obtain steel poles in a timely manner and used wood poles as a temporary measure until the steel poles could be delivered. The contractor also had difficulty in obtaining permits from the County and in obtaining permission from Union Pacific to work on the railroad right-of-way.

4.0 SUMMARY

The pilot program has taken longer than expected to implement. Photo enforcement of traffic laws is a relatively new technology that has not been implemented on a national level. As of March 2001, New York, California, and nine other states have implemented photo enforcement programs. Each of the three sites were essentially custom installations which use sophisticated computer processes to record apparent violations, automatically review the apparent violations and then use custom citation writing software to complete the process. Securing construction permits from the municipalities slowed the process down, as did the process of obtaining railroad authority to be on the railroad right-of-way.

Once the sites were constructed, they have experienced few mechanical problems. Wood Dale has had some mechanical problems due to film jams which kept the site out of operation for a total of 9 days over the course of the test period. Naperville encountered problems with the lighting at River Road and a problem with the camera housing which caused many apparent violations recorded in November and December not to be prosecuted because of poor image quality. Overall, Wood Dale's site has been available and working 98 percent of the time (377 days out of 386 days), while Naperville's site has been in good working order 83 percent of the time (150 days out of 180).

The most significant problem encountered has not been mechanical but procedural. Judge McKillip's October 18, 2000 decision blocked prosecution of apparent violations at Wood Dale. As a result, Wood Dale Police are only issuing warning notices to violators. Until the legality of the photo enforcement issue is resolved, photo enforcement in Wood Dale is on hold. Photo enforcement continues in Naperville, under local ordinance. DuPage County will not issue either warnings or citations to individuals observed violating traffic laws at the Winfield Township grade crossing until the General Assembly has amended the state statute to clarify the procedure to admit photographs as evidence.

Photo enforcement has been very effective in reducing the rate of violations. Figure 9 presents a graph showing the decline in the number of daily violations at Irving Park Road in Wood Dale. A dramatic drop in daily violations is evident after day 121 due to the Wood Dale Police Department changing the definition of a violation. Wood Dale had been issuing citations to individuals based on a delay of three seconds from the point when the flashing lights activated. The delay was changed to five seconds to insure that the photo would show the gate descending and the vehicle in clear violation of the law.

Figure 9. Decrease in daily violations at Irving Park Road.

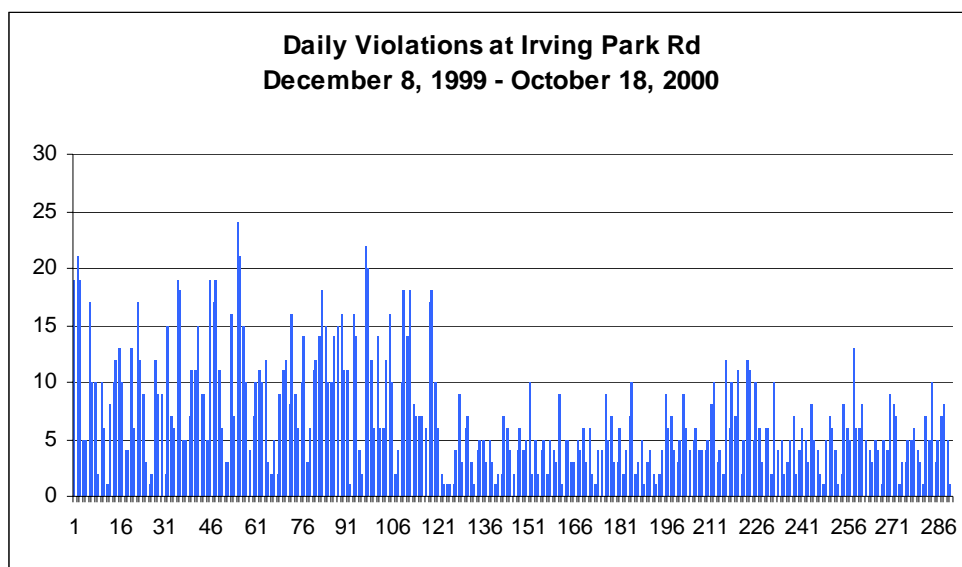


Photo enforcement installations are expensive to install and maintain. Table 6 indicates that the minimum cost to install and maintain a single installation for one year is \$263,222 with the maximum cost being \$344,116. FRA's proposed rule requiring horn sounding at all public grade crossings indicates that communities may utilize photo enforcement as a supplemental safety measure when designing quiet zones. One scenario suggested by FRA envisions a set up of four installations with one camera rotating between the four installations. Given that the average cost of the three pilot installations is \$301,000, a community would need to invest approximately \$1.2 million to construct and operate a four camera installation.

Table 6. Cost comparison.

City	Cost	Vendor	Traffic Lanes
Wood Dale	\$263,222	Lockheed Municipal Services	2*
Naperville	\$296,200	Science Applications International	2
Winfield Township	\$344,116	Nestor Traffic Systems	2

Note: Wood Dale's site on Irving Park Rd is a 4 lane road, but only westbound travel is monitored.

The local police departments also incur costs to operate a photo enforcement site. The Naperville and Wood Dale police departments both indicated that they devote approximately one full day per week to process citations and to appear in court. Naperville has one officer responsible for the operation of their site who is assisted by one technician. Wood Dale has trained five officers to use their system.

Photo enforcement installations appear to have the potential to pay for themselves. Wood Dale has issued approximately \$85,000 in fines over the eleven months the site was actively issuing citations. Naperville has issued a smaller amount of fines approximating

\$50,000. At the present rate, it is conceivable that photo installations at Wood Dale and Naperville could pay for themselves within 3 to 4 years. After that time, fine revenue not needed for maintenance of the photo enforcement system could be targeted to providing additional railroad safety programs within the community.

Preliminary indications suggest that automated enforcement is working very well in deterring individuals from violating grade crossing warning devices. Violations at Irving Park Road have declined by 47 percent while violations at River Road have declined by 51 percent. Irving Park Road was experiencing three to four collisions per year prior to photo enforcement and has had only one collision in 13 months of operation. River Road, which was experiencing an average of two collisions every five years, has been collision free since the activation of photo enforcement.

Photo enforcement of traffic laws at grade crossings is an effective tool to reduce violations and collisions. While photo enforcement has proven its ability to deter violations, the current cost of the installations precludes its use statewide. Photo enforcement is likely to be implemented only at selected high risk locations which have a history of collisions.

In order for the pilot program to continue at Wood Dale and to begin at Winfield Township, General Assembly action is required to amend the current state statute before the DuPage County State's Attorney will resume prosecution of violations based on photographic evidence.

Appendix A: Historical Timeline

- Unfortunately, as shown below, the pilot program was delayed due to the three communities' difficulty in finding firms with experience in implementing automated photo enforcement technology at highway-railroad grade crossings. The three firms that were ultimately selected, also encountered routine delays related to the construction of any type of complex civil engineering project involving high traffic volume roadways and railroads. Irving Park Road at Wood Dale was the first installation for which bids were let in 1998, however the site did not become active until December 1999. Naperville's River Road site went active in July 2000 and DuPage County's Sunset Avenue site is scheduled to be active by May 15th of 2001.
- On November 4, 1997, a stipulated agreement for Irving Park Road at Wood Dale was fully executed by all parties.
- On December 3, 1997, Commission Order T97-0084 was entered, which required Metra to proceed with the project and to complete the work within 12 months.
- In December 1997, the Commission selected two additional photo enforcement locations: Sunset Avenue near Winfield on the Union Pacific (UP), and River Road in Naperville on the Burlington Northern and Santa Fe (BNSF).
- During the Fall of 1998, Metra sent out requests for proposals (RFP) to potential bidders for the Wood Dale site, but did not receive any responses. Metra then revised the specifications for the bid and once again submitted the RFP to potential bidders. This time, Metra received two bids for the Wood Dale site. The low bid was \$80,000 over budget and not according to specifications. No bidder was selected at this time. At this time, Naperville also sent out an RFP for the River Road site, but did not receive any responses.
- Commission staff worked with the communities and Metra to identify why there was a lack of qualified firms responding to the bids. Several additional firms were added to the potential vendor list. Finally, after six to nine months of effort refining the RFP and identifying additional vendors, sufficient responses were received to permit the awarding of a contract.
- On March 18, 1999, Commission staff received notice that Metra had awarded a contract to US Public Technology (a.k.a. Lockheed Municipal Services) for the Wood Dale site. Metra also requested an extension of time to complete the work until September 3, 1999.
- In March, 1999, Naperville let a bid for the River Road site for the second time; three bids were received.
- On April 9, 1999, Naperville selected Science Applications International Corporation as low bidder for the River Road site.

Appendix A: Historical Timeline

- On April 19, 1999, Metra and the City of Wood Dale filed a joint Supplemental Petition for an extension of time until September 3, 1999 to complete construction and performance testing of the Irving Park Road site.
- On April 29, 1999, a Stipulated Agreement was finalized for Naperville's River Road site on the Burlington Northern and Santa Fe Railroad.
- On July 8, 1999, Commission Order T99-0067 was entered, which required Naperville to proceed with the project and complete the work within six months.
- On September 3, 1999, Wood Dale's Irving Park Road site began collecting baseline violation rate data for a 30 day period. The baseline violation rate must be collected before a site may begin issuing citations in order to measure a site's ability to deter violations over time.
- On September 14, 1999, the DuPage County Division of Transportation awarded the contract to install an automated video enforcement system at Sunset Avenue to Nestor Traffic Systems.
- On December 10, 1999, the first monthly performance report was submitted to the Commission by the Wood Dale Police Department for the Irving Park Road location.
- On December 15, 1999, Commission Order T99-0121 was entered, which required Dupage County to proceed with the project and complete all work within six months.
- On March 30, 2000, the first citation case went before the Court on the Wood Dale grade crossing citations.
- On April 4, 2000, the DuPage County Sunset Avenue location contractor (Nestor Traffic Systems) notified Commission staff that they were having problems obtaining a sub-contractor to do the installation. Clark Dietz was eventually hired as a sub-contractor to Nestor Traffic Systems to handle the actual construction.
- On May 25, 2000, a press conference was held at River Road in Naperville to announce to the public that photo enforcement was going to be employed at this grade crossing.
- On July 31, 2000, the Naperville Police Department submitted their first monthly performance report for the River Road location.
- On July 31, 2000, DuPage County was contacted by Commission staff for a status report on the Sunset Avenue grade crossing. The project had been delayed for a variety of construction related issues and the County requested an extension of time. DuPage County notified Nestor Traffic Systems that a penalty of \$500 per day would be assessed until the project was finished. Penalties would be assessed starting from July 8, 2000, which was the originally scheduled completion date. Nestor Traffic Systems indicated a tentative

Appendix A: Historical Timeline

completion was scheduled for September 1, 2000 and the grade crossing should be ready to undergo acceptance testing at that time and then begin collection of baseline violation rates shortly thereafter.

- On August 17, 2000, DuPage County filed a Supplemental Petition requesting an extension of time to December 15, 2000.
- On August 25, 2000, Supplemental Order in Docket T99-0121 was entered, granting Dupage County an extension of time until December 15, 2000 to complete installation of the automated photo enforcement system at Sunset Avenue.
- On October 18, 2000, Associate Judge Brian McKillip of the Eighteenth Judicial Circuit, DuPage County issued a ruling finding two significant flaws with the photo enforcement process being used at Wood Dale. The Wood Dale Police Department stopped issuing citations because of this ruling and has began issuing warnings until the General Assembly amends the original Act to remedy the deficiencies outlined by Judge McKillip.
- On January 8, 2001, DuPage County requested a second extension of time through April 1, 2001 to permit Nestor Traffic Systems to conduct acceptance testing which was scheduled for the week of January 22, 2001.
- On March 20, 2001, DuPage County amended its request for an extension of time to July 1, 2001 to permit Nestor Traffic Systems to conduct acceptance testing which was rescheduled for April 1, 2001.
- On April 1, 2001, Nestor Traffic Systems successfully conducted acceptance testing of the photo enforcement system at Sunset Avenue. Baseline violation rates were being collected during the month of April 2001 and the site could be ready to issue citations beginning May 1, 2001.

Appendix B: Legal Foundation of Photo Enforcement in Illinois

The following section is a discussion summarizing Judge McKillips' October 18, 2000 decision regarding the implementation of automated photo enforcement of grade crossing traffic laws at Irving Park Road in Wood Dale. The section was prepared by the Commerce Commission's Office of Transportation Counsel.

Judge McKillip dismissed the tickets because of the inadequacy of the notice given to the registered owners. Section 11-1201.1(d) of the Vehicle Code requires that the citation sent to the registered owner "shall be accompanied by a written document which explains the violator's rights and obligations and how the violator can elect to proceed by either paying the fine or challenging the issuance of the Uniform Traffic citations." The Judge compared the language of the notice that is actually sent with the statutory requirement and found the notice wanting because, among other things, it does not contain an adequate explanation of the defendant's rights.

This finding of inadequate notice was all that was necessary for the Judge to dismiss the charges. However, the Judge took the highly unusual step (for a Circuit Court traffic case) of preparing a written decision, in which he discusses several other issues raised by the case. Clearly this discussion, which is not necessary to the decision of the case, is the Judge's attempt to draw a map so that future enforcement efforts will be more successful; in my opinion he has done a truly impressive job.

The notice sent by the prosecutors can be revised easily to meet Judge McKillip's objections. I believe that steps have already been taken to modify the notice sent for violations at the Naperville crossing. In addition to the defective notice, the Judge addressed the following issues:

The defendants' primary argument was that it violated the rights of the registered owner of a vehicle if he or she could be held responsible even though someone else who was actually driving the vehicle was the one who violated the crossing signals. But the Judge said this is not even an issue in this case. By the express wording of Section 11-1201.1, the violation here is of Section 11-1201, which applies to the **driver** of a vehicle. This means that as the law is now worded, this Judge would never convict the registered owner of a vehicle **unless** the registered owner also happened to be the person who was actually driving the car. This does not mean that it is not possible to hold the registered owner responsible when he lets another person drive the car and violate the signals; it means only that the law would have to be amended to accomplish this.

The opinion also finds a problem with the existing law in that it does not require any foundation for admitting the photographs into evidence. However, the Judge indicates that he does not believe this would be an insurmountable problem - I see it as necessitating some testimony from a representative of the agency operating the photo-enforcement devices about how the photo enforcement setup works and how it is maintained. It would probably be wise to adjust the statutory language in this regard, although it may not be absolutely necessary.

Finally, the Judge addressed the issue of the timing of the statute and whether it can still be enforced - the "two year" issue. The defendants argued one side and the State's Attorney

Appendix B: Legal Foundation of Photo Enforcement in Illinois

argued the other. The Judge found a third side, saying that the time limit has nothing to do with enforceability of the law - only with the time in which the Commission must report results of its study.

Wood Dale is no longer issuing tickets based on the photo-enforcement, although the cameras are still operating. My guess is that there is information to be gained from the operation of these cameras at all three sites no matter what the status of criminal enforcement activities. I understand that enforcement continues in Naperville and will proceed at the DuPage County site, and I recommend that we support continued enforcement.

The State's Attorney in DuPage County must now decide whether to appeal Judge McKillip's decision. A preliminary indication from Assistant State's Attorney Bobbie O'Leary is that they will decide not to appeal. As I read the Judge's decision, it seems to me that although work on the statute would be helpful, it would be possible to cure the defects without actually amending the statute. If the DuPage County State's Attorney agrees, they may make the necessary adjustments and proceed with enforcement in Wood Dale. However, even under this best-case scenario, only the actual drivers of the vehicles could be convicted. If we want to impose liability on the vehicle owner regardless of who was driving, it will be necessary to amend the law. It seems clear to me that the legislative intent from the beginning was to impose liability on the car owner. If the intent was to take action against the driver whether or not he or she was the registered owner, knowledge of who the car was owned by and a photo of the driver would only be the beginning of any enforcement - it would still be necessary to identify the driver so as to charge that person specifically. This would impose a tremendous burden on enforcement authorities, and, again, I don't believe this is what was intended by the law.

Although those who have some interest in this issue - legislators, prosecutors, other city officials, the Commission, etc. - may decide to act unilaterally, it would perhaps be best if statutory amendments are developed as the result of a cooperative process in which all stakeholders have the opportunity to participate. We should keep in mind that there may be other challenges to this law made in cases before other judges, who may decide these issues differently than Judge McKillip, or who may decide other issues that have not even been raised so far. We may want to bring in a consultant or two to advise on constitutional law issues, as well as the issue of what kinds of substantive and penalty provisions would make the law most effective in accomplishing its primary goal, which is to deter motorists from violating crossing warning devices.

The next section presents two bills which are before the Illinois General Assembly as of April 2001. As of April 18, 2001, Senate Bill 172 has been passed out of the Senate and House Bill 123 has been passed out of the House. Senate Bill 172 will remedy the deficiencies identified by Judge McKillip, while House Bill 123 will permit additional photo enforcement installations in DuPage County, however, no state monies may be spent to create or maintain these additional sites.

Appendix B: Legal Foundation of Photo Enforcement in Illinois

HB0123 Engrossed

1 AN ACT to amend the Illinois Vehicle Code by changing
2 Section 11-1201.1.
3 Be it enacted by the People of the State of Illinois,
4 represented in the General Assembly:
5 Section 5. The Illinois Vehicle Code is amended by
6 changing Section 11-1201.1 as follows:
7 (625 ILCS 5/11-1201.1)
8 Sec. 11-1201.1. Automated Railroad Crossing Enforcement
9 System.
10 (a) For the purposes of this Section, an automated
11 railroad grade crossing enforcement system is a system
12 operated by a law enforcement agency that records a driver's
13 response to automatic, electrical or mechanical signal
14 devices and crossing gates. The system shall be designed to
15 obtain a clear photograph or other recorded image of the
16 vehicle, vehicle operator and the vehicle registration plate
17 of a vehicle in violation of Section 11-1201. The photograph
18 or other recorded image shall also display the time, date and
19 location of the violation.
20 (b) Commencing on January 1, 1996, the Illinois Commerce
21 Commission and the Commuter Rail Board of the Regional
22 Transportation Authority shall, in cooperation with local law
23 enforcement agencies, establish a two year pilot program
24 within a county with a population of between 750,000 and
25 1,000,000 using an automated railroad grade crossing
26 enforcement system. The Commission shall determine the 3
27 railroad grade crossings within that county that pose the
28 greatest threat to human life based upon the number of
29 accidents and fatalities at the crossings during the past 5
30 years and with approval of the local law enforcement agency
31 equip the crossings with an automated railroad grade crossing

HB0123 Engrossed

-2-

1 enforcement system.
2 (b-1) Commencing on the effective date of this
3 amendatory Act of the 92nd General Assembly, the Illinois
4 Commerce Commission and the Commuter Rail Board may, in
5 cooperation with the local law enforcement agency, establish
6 in a county with a population of between 750,000 and
7 1,000,000 a 2 year pilot program using an automated railroad
8 grade crossing enforcement system. This pilot program may be
9 established at a railroad grade crossing designated by local
10 authorities. No State moneys may be expended on the automated
11 railroad grade crossing enforcement system established under
12 this pilot program.
13 (c) For each violation of Section 11-1201 recorded by an
14 automatic railroad grade crossing system, the local law
15 enforcement agency having jurisdiction shall issue a written
16 Uniform Traffic Citation of the violation to the registered
17 owner of the vehicle. The Uniform Traffic Citation shall be
18 delivered to the registered owner, by mail, within 30 days of
19 the violation. The Uniform Traffic Citation shall include
20 the name and address of vehicle owner, the vehicle
21 registration number, the offense charged, the time, date, and
22 location of the violation, the first available court date and
23 that the basis of the citation is the photograph or other

Appendix B: Legal Foundation of Photo Enforcement in Illinois

24 recorded image from the automated railroad grade crossing
25 enforcement system.

26 (d) The Uniform Traffic Citation issued to the violator
27 shall be accompanied by a written document which explains the
28 violator's rights and obligations and how the violator can
29 elect to proceed by either paying the fine or challenging the
30 issuance of the Uniform Traffic Citation.

31 (e) Any photograph or other recorded image evidencing a
32 violation of Section 11-1201 shall be admissible in any
33 proceeding resulting from the issuance of the Uniform Traffic
34 Citation. Photographs or recorded images made by an

HB0123 Engrossed

-3-

1 automatic railroad grade crossing enforcement system shall be
2 confidential, and shall be made available only to the
3 defendant, governmental and law enforcement agencies for the
4 purposes of adjudicating a violation of Section 11-1201 of
5 the Illinois Vehicle Code.

6 (f) Rail crossings equipped with an automatic railroad
7 grade crossing enforcement system shall be posted with a sign
8 visible to approaching traffic stating that the railroad
9 grade crossing is being monitored, that citations will be
10 issued, and the amount of the fine for violation.

11 (g) Except as provided in subsection (b-1), the cost of
12 the installation and maintenance of each automatic railroad
13 grade crossing enforcement system shall be paid from the
14 Grade Crossing Protection Fund if the rail line is not owned
15 by Commuter Rail Board of the Regional Transportation
16 Authority. Except as provided in subsection (b-1), if the
17 rail line is owned by the Commuter Rail Board of the Regional
18 Transportation Authority, the costs of the installation and
19 maintenance shall be paid from the Regional Transportation
20 Authority's portion of the Public Transportation Fund.

21 (h) The Illinois Commerce Commission shall issue a
22 report to the General Assembly at the conclusion of the two
23 year pilot program established under subsection (b) on the
24 effectiveness of the automatic railroad grade crossing
25 enforcement system.

26 (Source: P.A. 89-454, eff. 5-17-96; 90-14, eff. 7-1-97.)

27 Section 99. Effective date. This Act takes effect upon
28 becoming law.

Appendix B: Legal Foundation of Photo Enforcement in Illinois

SB172 Engrossed

1 AN ACT concerning vehicles.
2 Be it enacted by the People of the State of Illinois,
3 represented in the General Assembly:
4 Section 5. The Illinois Vehicle Code is amended by
5 changing Sections 11-1201 and 11-1201.1 as follows:
6 (625 ILCS 5/11-1201) (from Ch. 95 1/2, par. 11-1201)
7 Sec. 11-1201. Obedience to signal indicating approach of
8 train.
9 (a) Whenever any person driving a vehicle approaches a
10 railroad grade crossing such person must exercise due care
11 and caution as the existence of a railroad track across a
12 highway is a warning of danger, and under any of the
13 circumstances stated in this Section, the driver shall stop
14 within 50 feet but not less than 15 feet from the nearest
15 rail of the railroad and shall not proceed until he can do so
16 safely. The foregoing requirements shall apply when:
17 1. A clearly visible electric or mechanical signal
18 device gives warning of the immediate approach of a
19 railroad train;
20 2. A crossing gate is lowered or a human flagman
21 gives or continues to give a signal of the approach or
22 passage of a railroad train;
23 3. A railroad train approaching a highway crossing
24 emits a warning signal and such railroad train, by reason
25 of its speed or nearness to such crossing, is an
26 immediate hazard;
27 4. An approaching railroad train is plainly visible
28 and is in hazardous proximity to such crossing.
29 5. A railroad train is approaching so closely that
30 an immediate hazard is created.
31 (b) No person shall drive any vehicle through, around or

SB172 Engrossed

-2-

1 under any crossing gate or barrier at a railroad crossing
2 while such gate or barrier is closed or is being opened or
3 closed.
4 (c) The Department, and local authorities with the
5 approval of the Department, are hereby authorized to
6 designate particularly dangerous highway grade crossings of
7 railroads and to erect stop signs thereat. When such stop
8 signs are erected the driver of any vehicle shall stop within
9 50 feet but not less than 15 feet from the nearest rail of
10 such railroad and shall proceed only upon exercising due
11 care.
12 (d) At any railroad grade crossing provided with
13 railroad crossbuck signs, without automatic, electric, or
14 mechanical signal devices, crossing gates, or a human flagman
15 giving a signal of the approach or passage of a train, the
16 driver of a vehicle shall in obedience to the railroad
17 crossbuck sign, yield the right-of-way and slow down to a
18 speed reasonable for the existing conditions and shall stop,
19 if required for safety, at a clearly marked stopped line, or
20 if no stop line, within 50 feet but not less than 15 feet
21 from the nearest rail of the railroad and shall not proceed
22 until he or she can do so safely. If a driver is involved in
23 a collision at a railroad crossing or interferes with the
24 movement of a train after driving past the railroad crossbuck
25 sign, the collision or interference is prima facie evidence

Appendix B: Legal Foundation of Photo Enforcement in Illinois

26 of the driver's failure to yield right-of-way.
27 (e) It is unlawful to violate A violation of any part of
28 this Section. A first conviction of a person for a violation
29 of any part of this Section shall result in a mandatory fine
30 of \$250; all subsequent convictions of that person for any
31 violation of any part of this Section shall each result in a
32 mandatory fine of \$500 or 50 hours of community service.
33 (f) Corporate Local authorities of municipal
34 corporations regulating operators of shall impose fines as

SB172 Engrossed

-3-

1 established in subsection (e) for vehicles that fail to obey
2 signals indicating the presence, approach, passage, or
3 departure of a train shall impose fines as established in
4 subsection (e) of this Section.
5 (Source: P.A. 89-186, eff. 1-1-96; 89-658, eff. 1-1-97.)
6 (625 ILCS 5/11-1201.1)
7 Sec. 11-1201.1. Automated Railroad Crossing Enforcement
8 System.
9 (a) For the purposes of this Section, an automated
10 railroad grade crossing enforcement system is a system
11 operated by a law enforcement agency that records a driver's
12 response to automatic, electrical or mechanical signal
13 devices and crossing gates. The system shall be designed to
14 obtain a clear photograph or other recorded image of the
15 vehicle, vehicle operator and the vehicle registration plate
16 of a vehicle in violation of Section 11-1201. The photograph
17 or other recorded image shall also display the time, date and
18 location of the violation.
19 (b) Commencing on January 1, 1996, the Illinois Commerce
20 Commission and the Commuter Rail Board of the Regional
21 Transportation Authority shall, in cooperation with local law
22 enforcement agencies, establish a 5 two year pilot program
23 within a county with a population of between 750,000 and
24 1,000,000 using an automated railroad grade crossing
25 enforcement system. The Commission shall determine the 3
26 railroad grade crossings within that county that pose the
27 greatest threat to human life based upon the number of
28 accidents and fatalities at the crossings during the past 5
29 years and with approval of the local law enforcement agency
30 equip the crossings with an automated railroad grade crossing
31 enforcement system.
32 (c) For each violation of Section 11-1201 recorded by an
33 automatic railroad grade crossing system, the local law

SB172 Engrossed

-4-

1 enforcement agency having jurisdiction shall issue a written
2 Uniform Traffic Citation of the violation to the registered
3 owner of the vehicle as the alleged violator. The Uniform
4 Traffic Citation shall be delivered to the registered owner
5 of the vehicle, by mail, within 30 days of the violation.
6 The Uniform Traffic Citation shall include the name and
7 address of vehicle owner, the vehicle registration number,
8 the offense charged, the time, date, and location of the
9 violation, the first available court date and that the basis
10 of the citation is the photograph or other recorded image
11 from the automated railroad grade crossing enforcement
12 system.
13 (d) The Uniform Traffic Citation issued to the
14 registered owner of the vehicle violator shall be accompanied

Appendix B: Legal Foundation of Photo Enforcement in Illinois

15 by a written notice, the contents of which is set forth in
16 subsection (d-1) of this Section, explaining document which
17 explains the violator's rights and obligations and how the
18 registered owner of the vehicle violator can elect to proceed
19 by either paying the fine or challenging the issuance of the
20 Uniform Traffic Citation.

21 (d-1) The written notice explaining the alleged
22 violator's rights and obligations must include the following
23 text:

24 "You have been served with the accompanying Uniform
25 Traffic Citation and cited with having violated Section
26 11-1201 of the Illinois Vehicle Code. You can elect to
27 proceed by:

- 28 1. Paying the fine; or
- 29 2. Challenging the issuance of the Uniform Traffic
30 Citation in court; or
- 31 3. If you were not the operator of the vehicle at the
32 time of the alleged offense, notifying in writing the
33 local law enforcement agency that issued the Uniform
34 Traffic Citation of the number of the Uniform Traffic

SB172 Engrossed

-5-

1 Citation received and the name and address of the person
2 operating the vehicle at the time of the alleged offense.
3 If you fail to so notify in writing the local law
4 enforcement agency of the name and address of the
5 operator of the vehicle at the time of the alleged
6 offense, you may be presumed to have been the operator of
7 the vehicle at the time of the alleged offense."

8 (d-2) If the registered owner of the vehicle was not the
9 operator of the vehicle at the time of the alleged offense,
10 and if the registered owner notifies the local law
11 enforcement agency having jurisdiction of the name and
12 address of the operator of the vehicle at the time of the
13 alleged offense, the local law enforcement agency having
14 jurisdiction shall then issue a written Uniform Traffic
15 Citation to the person alleged by the registered owner to
16 have been the operator of the vehicle at the time of the
17 alleged offense. If the registered owner fails to notify in
18 writing the local law enforcement agency having jurisdiction
19 of the name and address of the operator of the vehicle at the
20 time of the alleged offense, the registered owner may be
21 presumed to have been the operator of the vehicle at the time
22 of the alleged offense.

23 (e) Evidence.

24 (i) A certificate alleging that a violation of
25 11-1201 occurred, sworn to or affirmed by a duly
26 authorized agency, based on inspection of recorded images
27 produced by an automated railroad crossing enforcement
28 system are evidence of the facts contained in the
29 certificate and are admissible in any proceeding alleging
30 a violation under this Section.

31 (ii) Photographs or recorded images made by an
32 automatic railroad grade crossing enforcement system are
33 confidential and shall be made available only to the
34 alleged violator and governmental and law enforcement

SB172 Engrossed

-6-

1 agencies for purposes of adjudicating a violation of
2 Section 11-1201 of the Illinois Vehicle Code. However,

Appendix B: Legal Foundation of Photo Enforcement in Illinois

3 any photograph or other recorded image evidencing a
4 violation of Section 11-1201 shall be admissible in any
5 proceeding resulting from the issuance of the Uniform
6 Traffic Citation when there is reasonable and sufficient
7 proof of the accuracy of the camera or electronic
8 instrument recording the image. There is a rebuttable
9 presumption that the photograph or recorded image is
10 accurate if the camera or electronic recording instrument
11 was in good working order at the beginning and the end of
12 the day of the alleged offense. Photographs or recorded
13 images made by an automatic railroad grade crossing
14 enforcement system shall be confidential, and shall be
15 made available only to the defendant, governmental and
16 law enforcement agencies for the purposes of adjudicating
17 a violation of Section 11-1201 of the Illinois Vehicle
18 Code.

19 (f) Rail crossings equipped with an automatic railroad
20 grade crossing enforcement system shall be posted with a sign
21 visible to approaching traffic stating that the railroad
22 grade crossing is being monitored, that citations will be
23 issued, and the amount of the fine for violation.

24 (g) The cost of the installation and maintenance of each
25 automatic railroad grade crossing enforcement system shall be
26 paid from the Grade Crossing Protection Fund if the rail line
27 is not owned by Commuter Rail Board of the Regional
28 Transportation Authority. If the rail line is owned by the
29 Commuter Rail Board of the Regional Transportation Authority,
30 the costs of the installation and maintenance shall be paid
31 from the Regional Transportation Authority's portion of the
32 Public Transportation Fund.

33 (h) The Illinois Commerce Commission shall issue a
34 report to the General Assembly at the conclusion of the 5 two

SB172 Engrossed

-7-

1 year pilot program on the effectiveness of the automatic
2 railroad grade crossing enforcement system.

3 (i) If any part or parts of this Section are held by a
4 court of competent jurisdiction to be unconstitutional, the
5 unconstitutionality shall not affect the validity of the
6 remaining parts of this Section. The General Assembly hereby
7 declares that it would have passed the remaining parts of
8 this Section if it had known that the other part or parts of
9 this Section would be declared unconstitutional.

10 (j) Penalty.

11 (i) A violation of this Section is a petty offense
12 for which a fine of \$250 shall be imposed for a first
13 violation, and a fine of \$500 shall be imposed for a
14 second or subsequent violation.

15 (ii) For a second or subsequent violation, the
16 Secretary of State may suspend the registration of the
17 motor vehicle for a period of at least 6 months.

18 (Source: P.A. 89-454, eff. 5-17-96; 90-14, eff. 7-1-97.)

19 Section 99. Effective date. This Act takes effect upon
20 becoming law.

Appendix C: Sample Citations

IN THE EIGHTEENTH JUDICIAL CIRCUIT COURT DUPAGE COUNTY, ILLINOIS

To:



Court Location:

505 N. County Farm Rd.
Wheaton IL 60187

Please take notice that the vehicle described and pictured herein did not stop for the grade crossing signal at the place, date, and time specified in violation of the City of Naperville Ordinance 11-1-11-1201b "Obedience to signal indicating approach of a train." Recorded images are evidence of a violation of the Illinois law concerning obedience to the signal of an approach of a train, and automated grade crossing programs.

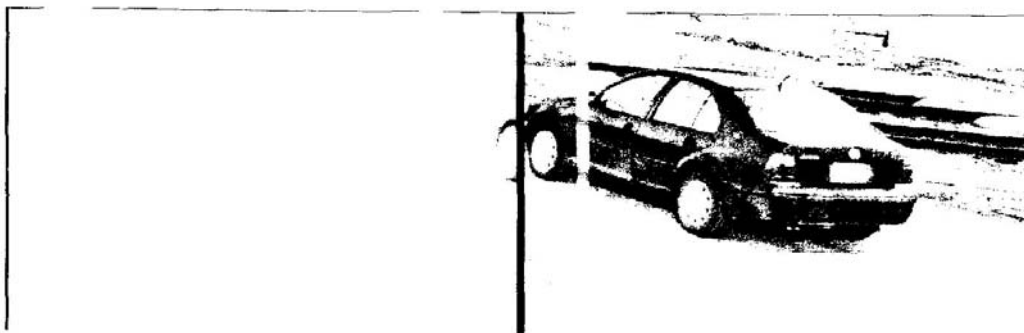
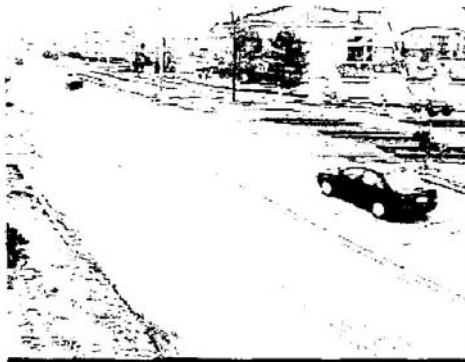
Pursuant to City Ordinance 11-1-11-1201.1c as the registered owner of the vehicle you are liable for the violation.

Pursuant to City Ordinance 11-1-11-1201e the penalty for this violation is \$500 plus court costs, or 50 hours of community service.

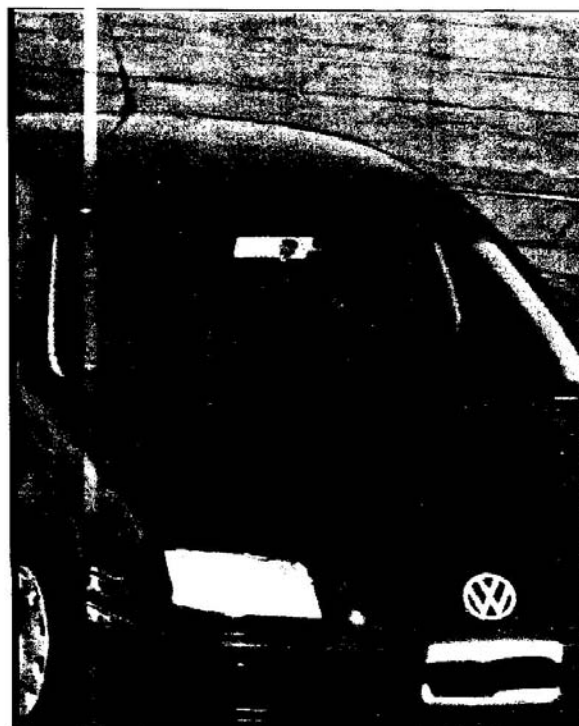
This is a **must appear violation**. The Circuit Court Clerk will notify you of your court date and time. This notice will be sent by regular mail.

You may elect to pay the fine and court costs, or you may perform 50 hours of community service and pay the court costs. If you wish you may contest the issuance of the citation by pleading not guilty and requesting a trial.


Date and Time of Violation: 2/7/01 1239 hrs.
Location of Violation: River Road at BNSF Rail Crossing
Vehicle License Plate Number: [REDACTED]
Citation Number: NA355741



Appendix C: Sample Citations



Appendix C: Sample Citations



IN THE EIGHTEENTH JUDICIAL CIRCUIT COURT DuPAGE COUNTY, ILLINOIS


To: [REDACTED]

Court Location
131 West Lake St.
Addison, IL 60101

Please take notice that the vehicle described and pictured herein did not stop for the grade crossing at the place, date and time specified in violation of 625 ILCS 5/11-1201 "Obedience to signal indicating approach of train." Recorded images are evidence of a violation of the Illinois law concerning obedience to signal indicating approach of train, and automated grade crossing enforcement programs.

Pursuant to 625 ILCS 5/11-1201.1 as the registered owner of this vehicle you are liable for the violation. The penalty for this violation is \$500 and costs or 50 hours of community service.

This is a **first appearance** violation. You will be notified of your court date and time by the Circuit Court Clerk. This notice will be sent by regular mail. If you wish to contest this violation, appear in court on the date set by the Circuit Court Clerk. For additional information regarding this notice please contact the Traffic Bureau at 1-800-369-5352. Hours are 9 a.m. to 5 p.m., P.T.

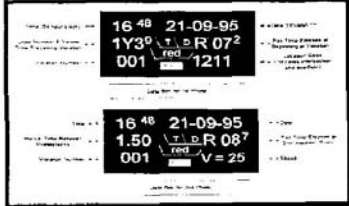
Date and Time of Violation:	Location of Violation:	Vehicle Tag	
Jan 10 2000 12:07PM	Irving Park Rd		

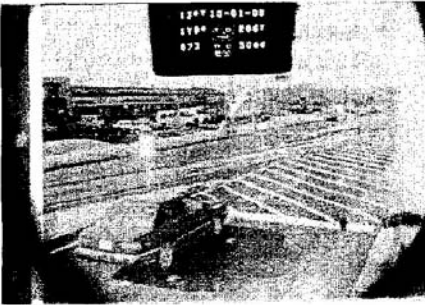

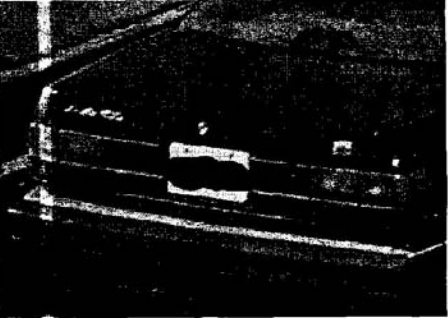

Citation Number: WD1100150RR

Amount Due: \$500.00

COPY

Sample Data Box



Appendix C: Sample Citations

SECTION D DO NOT FORWARD TO COURT CITATION No. WD110

IF YOU DID NOT OWN OR WERE NOT DRIVING THE VEHICLE AT THE TIME OF THE VIOLATION, PLEASE COMPLETELY FILL IN THE INFORMATION BELOW ON THE PERSON ACTUALLY DRIVING.

Print Individual's Name: _____ Driver's License/I.D. No.: _____
Address _____ Issued In The State Of: _____
City, St. Zip _____ Date Of Birth: _____

☒ CHECK ONE OF THE FOLLOWING: ☐ New Owner (If vehicle was sold PRIOR TO VIOLATION date) ☐ Identified Driver (Driver—other than registered owner)

DECLARATION
I CERTIFY THAT UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT.

Date: _____
Signature: _____
Print Your Full Name: _____
Your Phone Number: _____

Detach the completed Section D and mail it, along with a photocopy of your drivers' license to: Traffic Violations Bureau P.O. Box 910474 San Diego, CA 92191.

Time (24 hour clock) → 16⁴⁸ ← Date (DD-MM-YY) 21-09-95

Loop Number & Yellow Time Preceding Violation → 1Y3⁹ ← Red Time Elapsed at Beginning of Violation T D R 07²

Violation Number → 001 ← Location Code (indicates intersection and direction) red 1211

Data Box for 1st Photo

Time → 16⁴⁸ ← Date 21-09-95

Interval Time Between Photographs → 1.50 ← Red Time Elapsed at 2nd Violation Photo T D R 08⁷

Violation Number → 001 ← Speed red V = 25

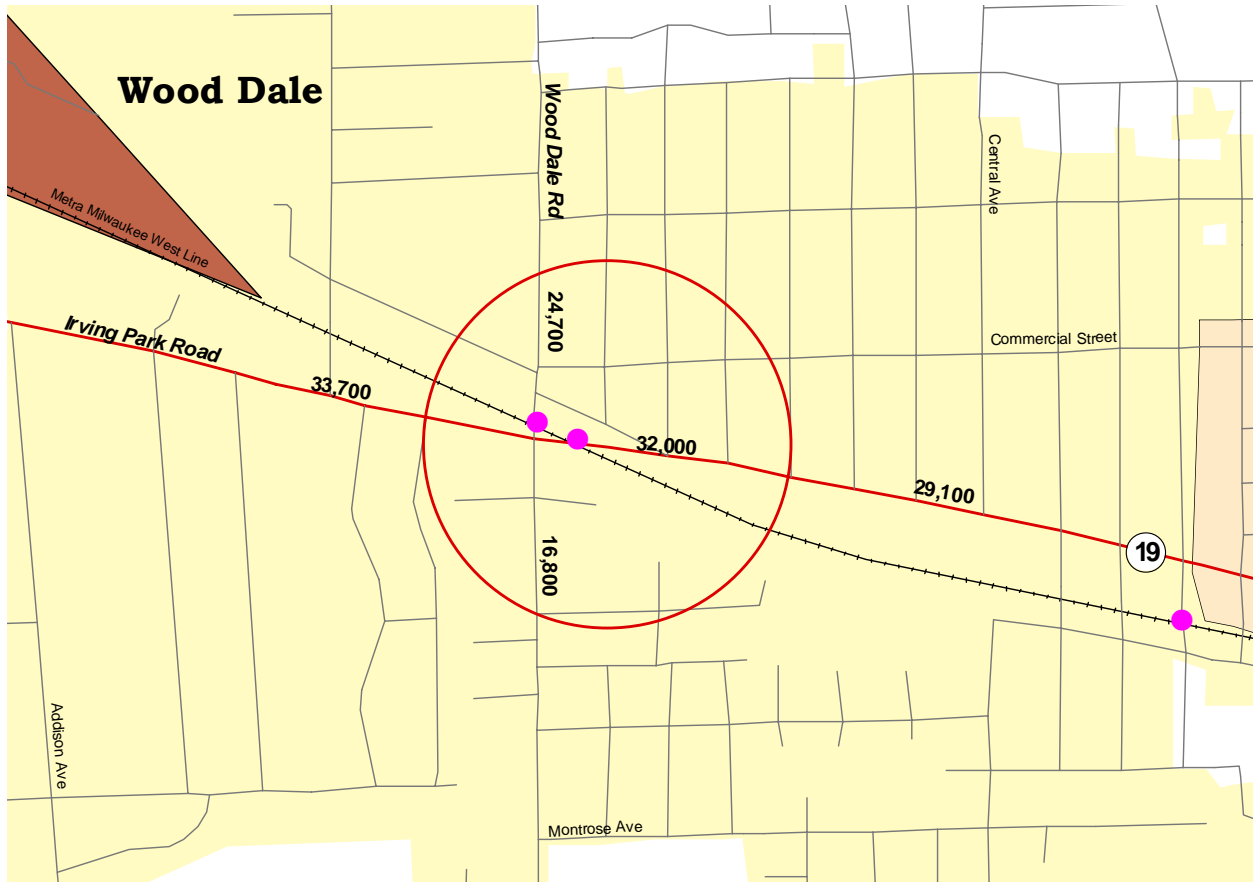
Data Box for 2nd Photo

Sample Data Box

Appendix C: Sample Citations

ILLINOIS CITATION AND COMPLAINT - WOOD DALE POLICE	
COMPLAINT	<div style="display: flex; justify-content: space-between;"> <div> CASE NO. _____ STATE OF ILLINOIS COUNTY OF DUPAGE </div> <div> <div style="font-size: 1.2em; font-weight: bold;">WD11000150RR</div> <div style="font-weight: bold;">POLICE COPY</div> </div> <div> TWP. _____ RD. _____ VS _____ </div> </div>
	<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> PEOPLE STATE OF ILLINOIS VS </div> <div> <input type="checkbox"/> CITY OF WOOD DALE MUNICIPAL CORPORATION PLAINTIFF </div> </div>
	<div style="display: flex; justify-content: space-between;"> <div> NAME _____ <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> Last First Middle </div> </div> <div> ADDRESS _____ Street _____ CITY _____ State <u>IL</u> Zip Code <u>60004</u> DR LIC _____ CDL _____ ST _____ Eyes _____ HT _____ WT _____ Sex <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female Date of Birth ____/____/____ Type _____ Class _____ Expires _____ Restriction _____ </div> </div>
	The Undersigned states that on <u>1/27/00</u> at <u>12:51 A.M.P.M</u>
DEFENDANT / VEH OWNER	<div style="display: flex; justify-content: space-between;"> <div> REGISTR NO. _____ MAKE _____ </div> <div> STATE <u>IL</u> YEAR _____ YEAR <u>1990</u> COLOR <u>DARK</u> </div> </div>
	<div style="display: flex; justify-content: space-between; font-size: 0.8em;"> <div> 0 PEDESTRIAN 1 PASSENGER CAR 2 REC VEHCL OR TRUCK 3 BUS 4 TRUCK TRACTOR 5 TRAIL OR SEMI-TRAIL 6 MOTORCYCLE OR BICYCLE 7 OTHER 8 COMMOTOR VEHICLE 9 PLACARDED HAZ MAT </div> </div>
	Upon a Public Highway, or other Location, Specifically <u>12152 Irving Park Rd Wood Dale Illinois</u>
	Located in the County and State Aforesaid and Did Then and There Commit the Following Offense
VIOLATION	<div style="display: flex; justify-content: space-between;"> <div> 3-707 OPERATING UNINSURED VEHICLE 6-101 NO VALID DRIVERS LICENSE 6-303 () DRIVING WHILE LICENSE SUSPEND/REVOKED 11-305 DISOBEYING TRAFFIC CONTROL DEVICE 11-501(a) () DRIVING UNDER INFLUENCE </div> <div> 11-502 () ILLEGAL TRANSPORTATION ALCOHOL 11-601(a) FAILURE TO REDUCE SPEED/ACCIDENT 11-601(b) SPEEDING ____MPH IN A ____MPH ZONE 11-709 () IMPROPER LANE USAGE 2-603 1 FAILURE TO WEAR SEAT BELT ()D()P </div> </div>
	ILCS LOCAL ORDINANCE CH <u>625</u> ACT <u>5</u> SEC <u>11-1201-1(a)</u>
	NATURE OF OFFENSE <u>OBEEDIENCE TO SIGNAL INDICATING APPROACH OF TRAIN</u>
INCIDENT	<div style="display: flex; justify-content: space-between; font-size: 0.8em;"> <div> ACCIDENT TYPE ROAD CONDITIONS VISIBILITY METHOD </div> <div> DRIVER INJURY ONLY WET DAY 0 H H RADAR </div> <div> PROPERTY DAMAGE DRY NIGHT 1 PL CAR </div> <div> PERSONAL INJURY SNOW RAIN 2 RADAR </div> <div> FATAL ICE SNOW 3 A CRAFT </div> <div> REF NO. FOG 4 MARKED 5 VASCAR </div> <div> CLEAR 6 C SIGNED 7 ASSIST 8 ACCIDENT 9 OTHER </div> </div>
	NOTATIONS <u>Photo Enforcement</u>
COURT PLACE	DuPage County Circuit Court, 131 West Lake Street Addison, Illinois 60101
	COURT APPEARANCE REQUIRED.
	You will be notified of your court date and time by the Circuit Court Clerk. This notice will be sent by regular mail.
	YOU MUST IMMEDIATELY NOTIFY THE CIRCUIT COURT CLERK OF ANY CHANGE OF ADDRESS AT (630) 682-7080.
Under penalties as provided by law for false certification pursuant to Section 1-109 of the Code of Civil Procedure and perjury pursuant to Section 32-2 of the Criminal Code of 1961, the undersigned certifies that the statements set forth in this instrument are true and correct.	

Appendix D: Photos and Maps



Irving Park Road at Wood Dale, Illinois.

Appendix D: Photos and Maps



Irving Park Road at Wood Dale.

Appendix D: Photos and Maps



Irving Park Road looking west. This grade crossing is surrounded by commercial development and has a Metra station only a few hundred feet to the east. The traffic control devices at Wood Dale Road are interconnected with the grade crossing warning devices at this grade crossing.

Appendix D: Photos and Maps



Irving Park Road Westbound Travel Lanes with Danger Zone Crosshatched. Fourteen collisions had occurred at this grade crossing between 1991 and 1995 primarily because of traffic backing up onto the grade crossing when stopped by the four-way intersection with Wood Dale Road in the distance. The crosshatching delineates the zone which vehicles may not occupy at any time. To the right is a Metra parking lot.

Appendix D: Photos and Maps



Irving Park Road Eastbound Travel Lanes. Eastbound traffic is not under surveillance because the four-way signalized intersection with Wood Dale Road 362 feet to the west, effectively controls eastbound traffic on Irving Park Road.

Appendix D: Photos and Maps



Irving Park Road looking east while standing in the westbound travel lanes.

Appendix D: Photos and Maps



Irving Park Road looking east from the median. The platform for Metra's station is in the center of the photo. Approximately 54 Metra trains stop here every week day. Another 20 freight trains also travel through this crossing.

Appendix D: Photos and Maps



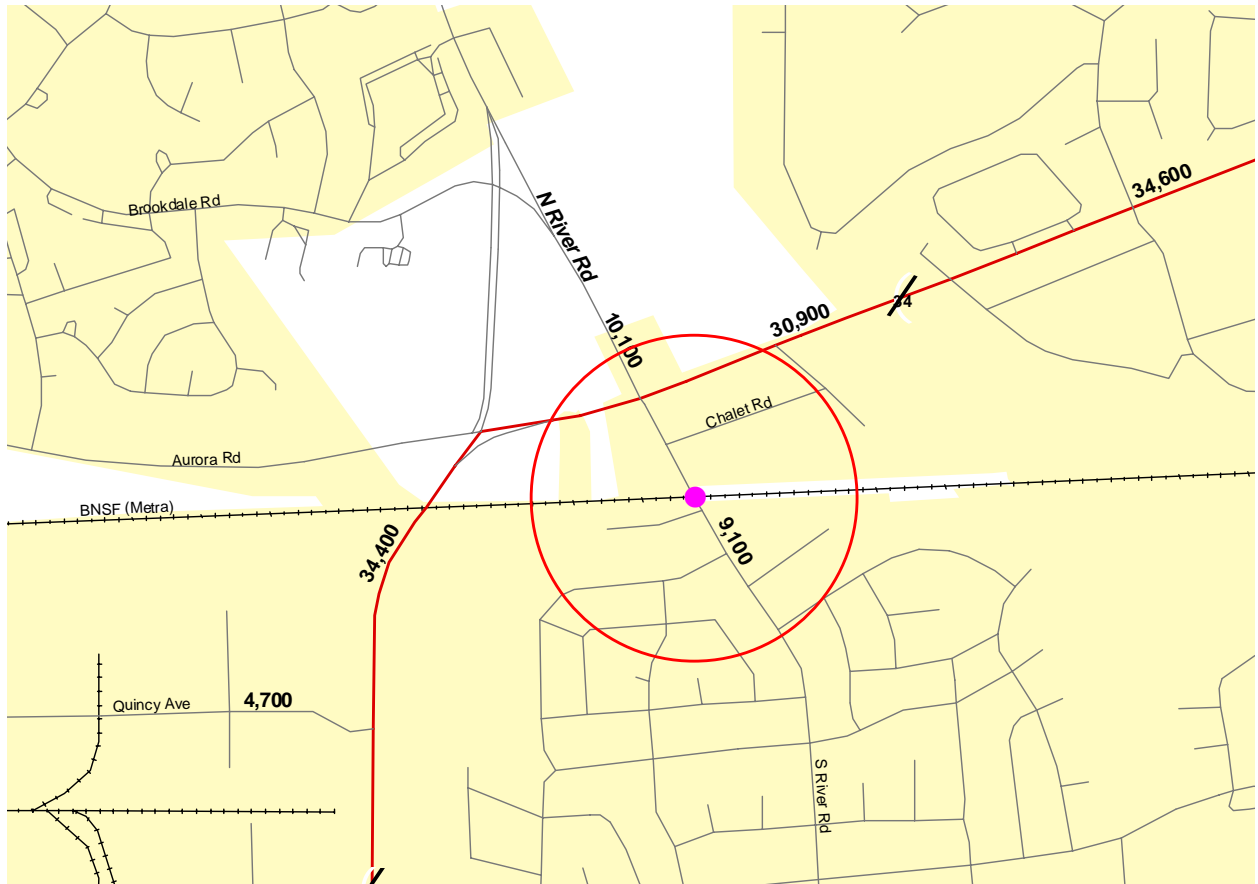
Irving Park Road looking northwest across the westbound travel lane towards the next grade crossing with Wood Dale Road immediately to the west. The aerial photo at the beginning of this section illustrates the close proximity with which Wood Dale Road intersects with Irving Park Road. The camera in the upper left hand corner captures an image of the driver's face and of the front plate of the vehicle.

Appendix D: Photos and Maps



Irving Park Road looking west towards the intersection with Wood Dale Road 362 feet away. The box in the center contains the camera and supplemental lighting.

Appendix D: Photos and Maps



River Road at Naperville, Illinois.

Appendix D: Photos and Maps



River Road at Naperville.

Appendix D: Photos and Maps



River Road looking south across the tracks. The railroad here is BNSF's triple track raceway with approximately 140 trains per day. River Road is on the northwest side of Naperville in a residential area. Metra's Route 59 station is 2 miles to the west and the downtown Naperville Metra station is east of here about two miles.

Appendix D: Photos and Maps



River Road grade crossing looking west down the BNSF tracks.

Appendix D: Photos and Maps



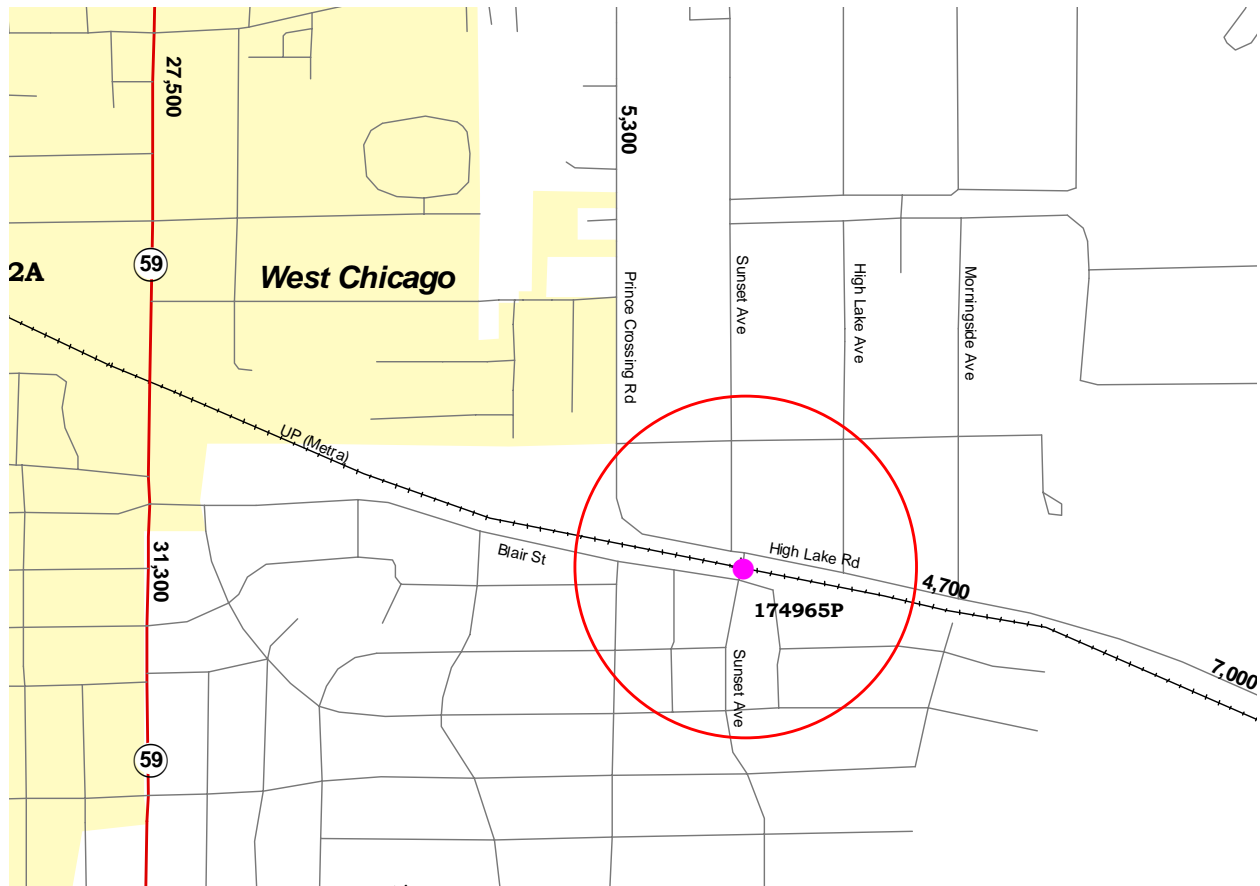
River Road grade crossing looking east down the BNSF tracks.

Appendix D: Photos and Maps



River Road looking north towards the four-way signalized intersection with Ogden Avenue 900 feet away.

Appendix D: Photos and Maps



Sunset Avenue in unincorporated DuPage County near West Chicago.

Appendix D: Photos and Maps



Sunset Avenue in Winfield Township. West Chicago is approximately one-quarter mile to the west along High Lake Road which is the northwest-southeast running road at the top of the photo. Sunset Avenue provides the only eastern access into the subdivision at the bottom of the photo. Sunset Avenue is on the Union Pacific's triple track mainline to Omaha which sees about 120 trains per day.

Appendix D: Photos and Maps



Sunset Avenue looking south over the tracks into the subdivision. Sunset Avenue has about 300 vehicles per day traveling over the crossing.

Appendix D: Photos and Maps



Sunset Avenue grade crossing looking west along the Union Pacific tracks towards West Chicago. West Chicago is home to one of Union Pacific's small yards and a Metra coach yard. Trains are traveling at a wide variety of speeds over this crossing ranging from barely moving as they enter/depart West Chicago Yard to the authorized maximum track speed which is 70 miles per hour.

Appendix D: Photos and Maps



Sunset Avenue grade crossing looking east towards Winfield.

Appendix D: Photos and Maps



Sunset Avenue looking north across the tracks and towards High Lake Road. High Lake Road runs parallel to the Union Pacific tracks 53 feet away on the north side of the road while Blair Road runs parallel to the tracks 50 feet away on the south side.